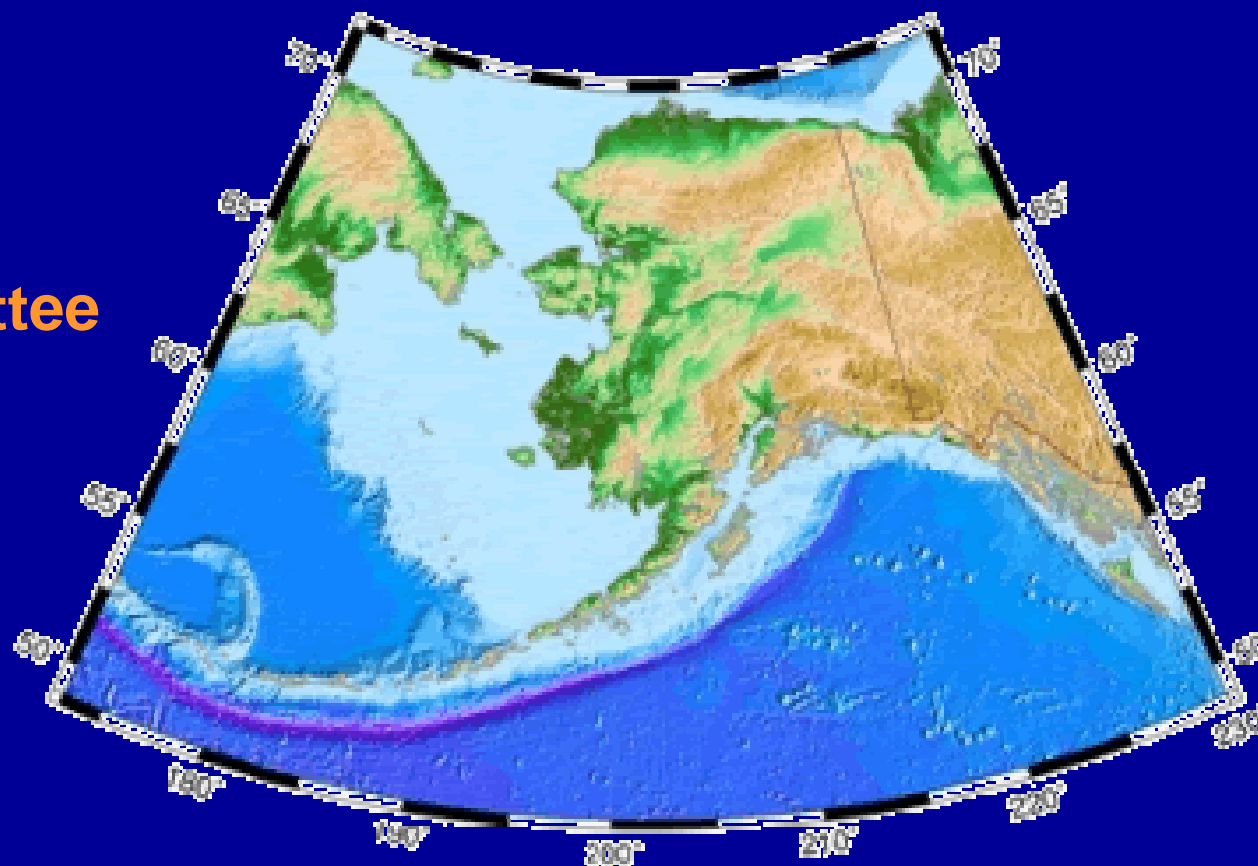


Alaska Region Overview

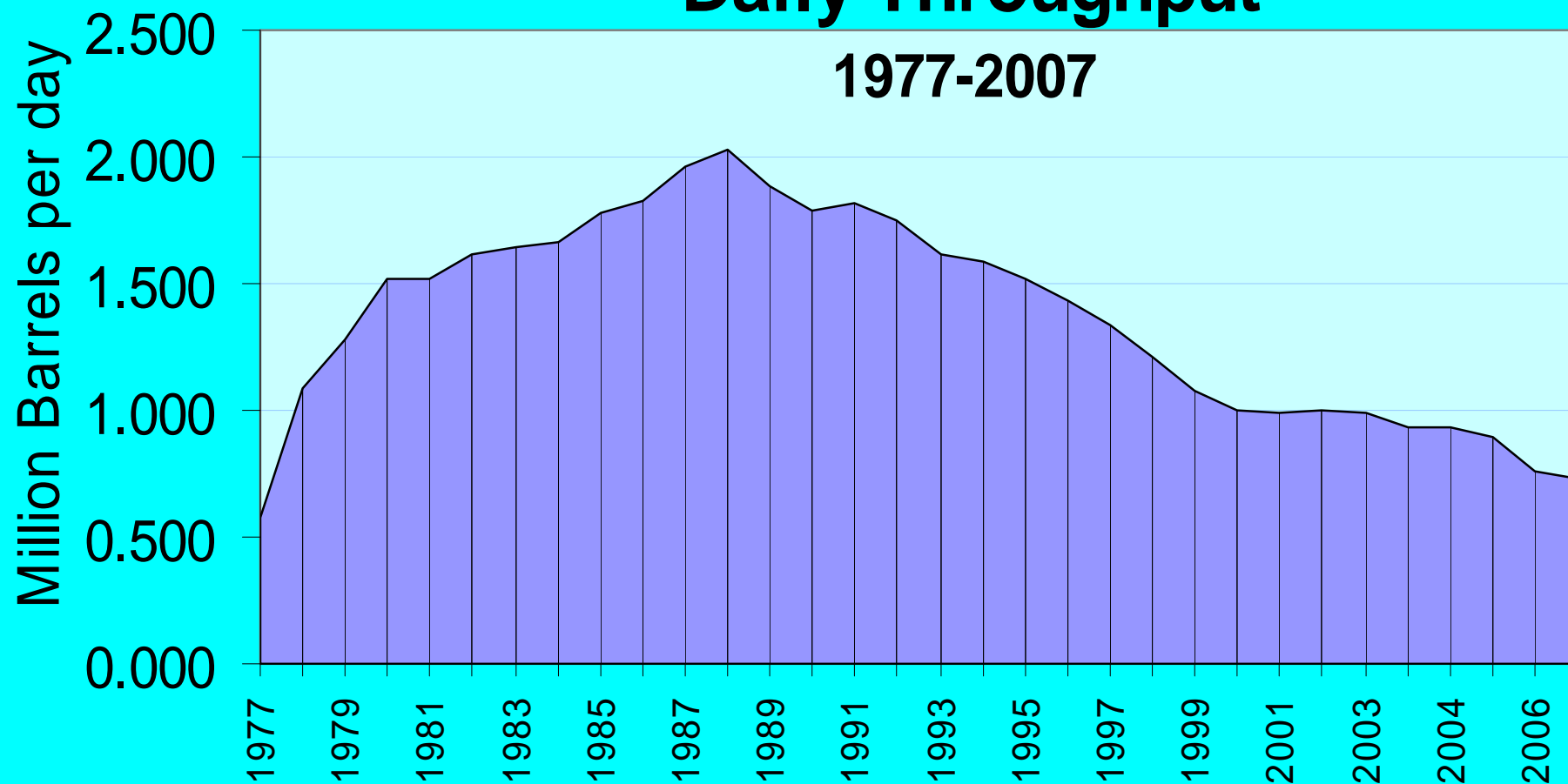
OCS Policy Committee
March 2008



John Goll
Alaska Regional Director
U.S. Minerals Management Service

Trans-Alaska Pipeline

Daily Throughput



2007: 730,000 BOPD

Current Alaska OCS Activities



Lawsuits

US District Court of Alaska

- Beaufort Sea Sale 202
 - DOI prevailed in Alaska District
 - 2/27 appeal to 9th Circuit
- Chukchi Sea Sale 193
 - newly filed

U.S. Court of Appeals for the 9th Circuit

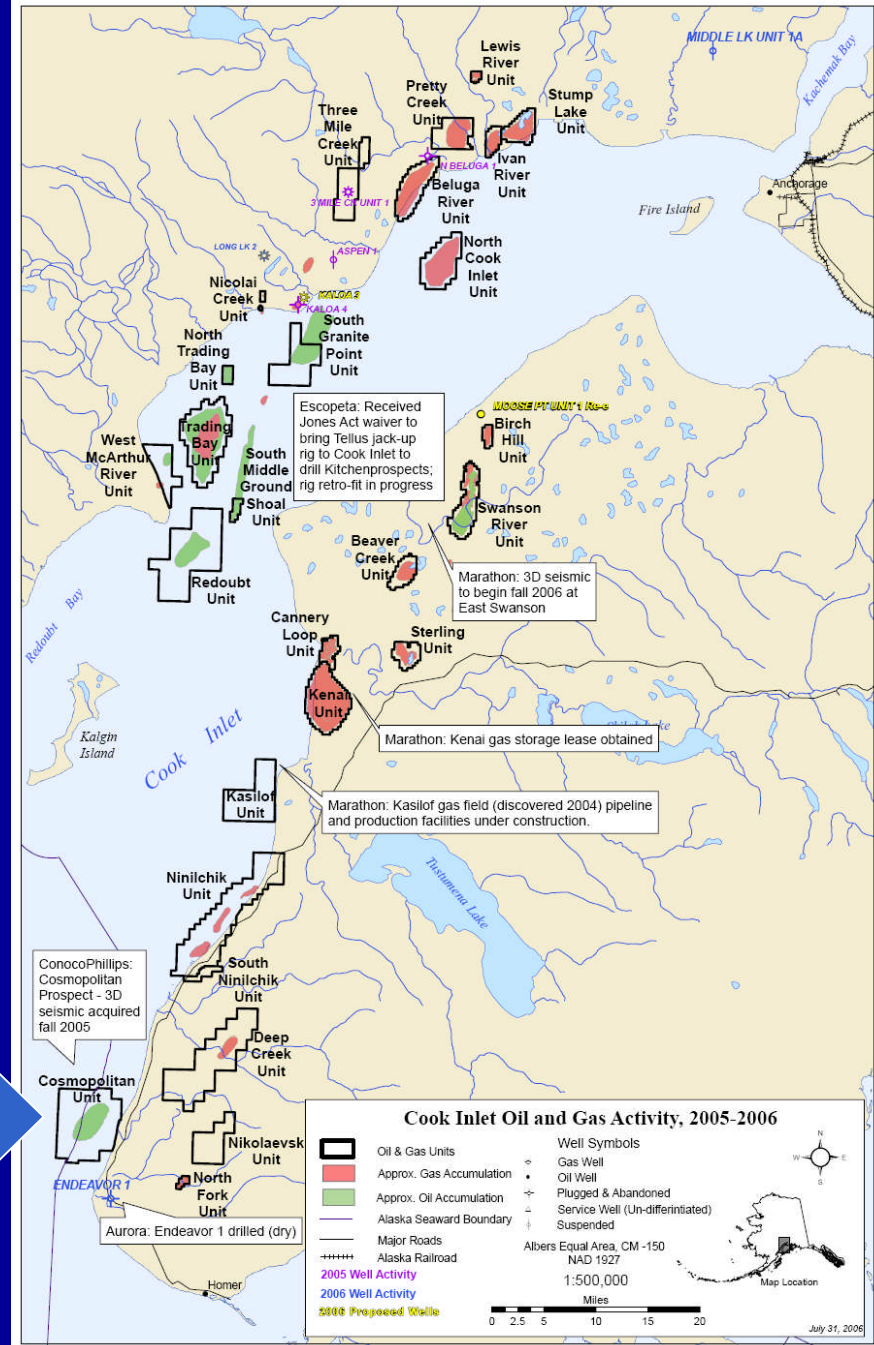
- Shell Beaufort Sea exploration
 - Awaiting 9th Circuit Decision

Cook Inlet Cosmopolitan Unit

extended reach delineation
well (State/federal)
Pioneer assessing



ConocoPhillips Cosmopolitan project; photo taken Sept. 29, 2001.



Source: State of Alaska

Arctic Exploration

- Seismic surveys
 - 2006 & 2007 summer Chukchi/Beaufort
 - Ice hinders surveys – 2006
 - Late start in 2007 (IHA)
 - 2008 Chukchi/Beaufort
- Exploration drilling
 - Beaufort Sea - None
 - Shell had proposed – Sivulliq, “open water”
 - Lawsuit



Arctic Offshore Development/Production

Past

Northstar (BF)

producing (State/federal)
buried pipeline



- Near Future
Liberty (BF)
 - Development Plan
ultra extended reach

MMS Research

Environmental Studies



Technology Assessment and Research

Partnerships (present and future information sources)

- **ARLIS – Alaska Resources Library and Information Services**

- www.arlis.org



- **Coastal Marine Institute**

- University of Alaska
- <http://www.sfos.uaf.edu/cmi/>



- **AOOS – Alaska Ocean Observing System**

- www.aoot.org



- **NSSI – North Slope Science Initiative**

- www.northslope.org
- DOI, State of Alaska, North Slope Borough, et al



And many more

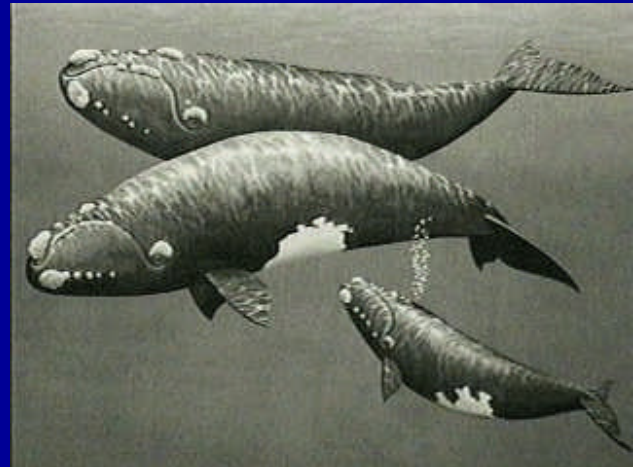
**MMS ALASKA ENVIRONMENTAL STUDIES
ONGOING PROGRAM
FY 2008**

Multi-disciplinary

- Continuation of Arctic Nearshore Impact Monitoring in Development Area (cANIMIDA) (Beaufort Sea – **Northstar/Liberty areas**)
- MMS - University of Alaska Fairbanks-State of Alaska **Coastal Marine Institute** Management
- CESU (Cooperative Ecosystem Studies Unit) with University of Alaska Fairbanks and ADFG – “Study of **Subsistence Sharing** Networks”

Protected Species

- **Bowhead** Feeding Variability in the Western AK **Beaufort** Sea:
 - A. Satellite Tracking of Bowhead Whales
 - B. Feeding Observations
 - C. Oceanographic Measurements & Analysis
- Aerial Photography of **Bowhead** Whales to Estimate the Size of the **Bering-Chukchi-Beaufort** Population
- Monitoring the Distribution of **Arctic Whales**
- Monitoring the Health of **Subsistence** Harvested Bowhead Whales
- **Pinniped** Movements and Foraging
- Protocol to Deflect Migrating **Bowhead** Whales Away from an Oil Spill
- Assessing Reproduction and Body Condition of the **Ringed Seal** Near Sachs Harbour, Northwest Territory, Canada, through a Harvest-based Sampling Program
- Radio Frequency Identification Tags for **Grizzly and Polar Bear** Research
- Population and Sources of Recruitment of **Polar Bears**
- Movements and Habitat Use of **Harbor Seals** in Cook Inlet
- Distribution and Abundance of **Harbor Seals** in Cook Inlet
- Distribution, Abundance, and Habitat Use of **North Pacific Right Whales**



Biology

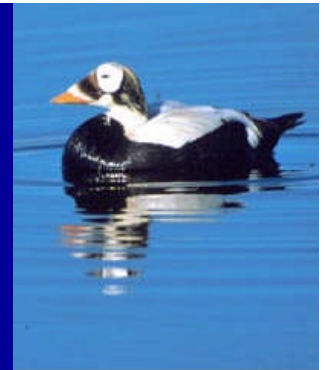
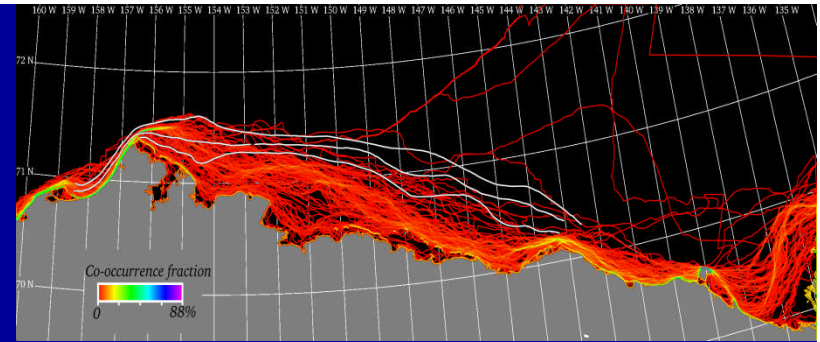


Photo: John Warden

- **Beaufort Sea Marine Fish** Monitoring: Pilot Survey and Test of Hypotheses
- **Arctic Fish** Ecology Catalogue
- Analysis of Variation in Abundance of **Arctic Cisco** in the Colville River
- Review and Monitoring Ambient Artificial Light Intensity in the OCS and the Potential for Effects on Resident **Fauna**
- Foraging Ecology of Common **Ravens** on Alaska's Coastal Plain and Relationship to O&G Development
- **King and Common Eider** Migrations Past Point Barrow
- **Population Structure of Common Eiders** Nesting on Coastal Barrier Islands Adjacent to Oil Facilities in the **Beaufort Sea**
- **Premigratory Movements and Physiology of Shorebirds** Staging on **Beaufort** Littoral Zone
- **Monitoring Marine Birds** of Concern in the Eastern **Chukchi** Nearshore Area
- Evaluating a Potential Relict Arctic **Invertebrate and Algal** Community on the West Side of Cook Inlet

Physical Oceanography



- Modeling of **Circulation** in the **North Aleutian Basin**
- Feasibility and Study Design for **Boundary Oceanography** of the **Beaufort Sea**
- Beaufort Sea **Mesoscale Meteorology**
- Mapping **Sea Ice Overflow** Using Remote Sensing from Smith Bay to Camden Bay
- Idealized Process Model Studies of **Circulation in the Landfast Ice Zone** of the Alaskan **Beaufort Sea**.
- Simulation of **Landfast Sea Ice** Along the Alaska Coast
- Beaufort Sea **Nearshore Currents**
- **Sea Ice Modeling** for Nearshore Beaufort and Chukchi Seas
- **Exchange** Between Elson Lagoon & the Nearshore Beaufort Sea & Its Role in the Aggregation of **Zooplankton**
- **Surface Circulation Radar Mapping** in Alaskan Coastal Waters: Field Study Beaufort Sea and Cook Inlet
- Physical Measurements and Seasonal **Boundary Conditions** in Cook Inlet, Alaska
- **Water and Ice Dynamics** in Cook Inlet
- High-Resolution Numerical Modeling of **Near-Surface Weather** Conditions over Alaska's Cook Inlet and Shelikof Strait

Fate and Effects

- Assessment of the Direction and Rate of **Alongshore Transport** of Sand and Gravel In Petroleum Development Region of the North Slope of Alaska
- Empirical **Weathering Properties of Oil** in Snow and Ice
- Updates to the **Fault Tree Approach to Oil Spill Occurrence** Estimators for the Beaufort and Chukchi Sea
- **Sea-Ice-Ocean-Oilspill Modeling** System (SIOMS) for the Nearshore Beaufort and Chukchi Seas: Improvement & Parameterization (Phase II)
- Synthesis of Time Interval changes in **Trace Metals & Hydrocarbons** in Nearshore Sediments of the AK Beaufort Sea: A Statistical Analysis

Social and Economic

- Study of **Sharing Networks** to Assess the Vulnerabilities of Local Communities to O&G Development Impacts in **Arctic Alaska**
- Researching **Technical Dialogue** with Alaskan Coastal Communities: Analysis of the Social, Cultural, Linguistic, and Institutional Parameters of Public/Agency Communication Patterns
- Quantitative Description of Potential Impacts of OCS Activities on **Bowhead Whale Hunting/Subsistence** in the **Beaufort Sea**
- **Subsistence Mapping** of Nuiqsut, Kaktovik and Barrow: Past and Present Comparison
- Impact Assessment for **Cross Island Whaling Activities**
- Publication of a Book/Synthesis on the **Socioeconomic Effects of Oil & Gas Industry** Activity on the Alaskan OCS
- Social and Economic Assessment of **Major Oil Spill Litigation** Settlement for the Alaska OCS Region

Ongoing National Oceanographic Partnership Program (NOPP) Studies

- Episodic Upwelling of **Zooplankton** within a **Bowhead Whale Feeding** Area near Barrow, AK
- A Comprehensive Modeling Approach Towards Understanding and Prediction of the Alaskan Coastal System Response to **Changes in an Ice-diminished Arctic**
- **Circulation, Cross-Shelf Exchange, Sea Ice, and Marine Mammal Habitats** on the Alaskan **Beaufort Sea Shelf**

Chukchi Sea Planned Studies FY-08

Chukchi Offshore Monitoring In Drilling Area (COMIDA)

- Distribution and Relative Abundance of Marine Mammals
- Chemical and Benthos Surveys
- Impact Monitoring of Offshore Subsistence Hunting

North Aleutian Basin (Bristol Bay) Planned - 2008

- **Subsistence** Study for North Aleutian Basin, Phase I
- Juvenile and Maturing **Salmon** Use of the North Aleutian Basin Lease Area
- Spatial and Temporal Mapping of Nearshore **Juvenile Fish and Settling Crab**

Technology Assessment and Research Program

- Safety and Engineering
- Oil Spill Research



International Oil in Ice Workshop 2007



Objective: To discuss recent advances in the cleanup of oil spills in ice and cold climates and to guide future R&D in areas of common interest

<http://www.mms.gov/tarprojects/587/webpages/home.html>

Workshop funders

- Minerals Management Service**
- Alaska Clean Seas**
- Alaska Department of Environmental Conservation**
- Cook Inlet Spill Prevention and Response**
- Prince William Sound Oil Spill Recovery Institute**
- U.S. Coast Guard.**

Mechanical Clean Up

- Water Jet Barrier Containment of Oil in the Presence of Broken Ice
- Evaluation of Skimmers for Offshore and Ice-Infested Waters
- Re-Engineering of a Stainless Steel Fireproof Boom for Using in Conjunction with Conventional Firebooms
- In Situ Clean up of Oiled Shorelines; Svalvard Shoreline Project
- Comprehensive Spill Response Tactics for the Alaska North Slope-Oil in Broken Ice Spill Response Scenarios
- Mechanical Oil Recovery in Ice Infested Waters (MORICE) - Phase III
- The Use of Ice Booms for the Recovery of Oil Spills from Ice Infested Waters
- Production of a White Paper and Workshop Regarding a Full Scale Experimental Oil Release in the Barents Sea Marginal Ice Zone
- Oil Recovery with Novel Skimmer Surfaces under Cold Climate Conditions
- Planning Support for an Experimental Oil Spill in Pack Ice
- Water Jet Barrier Containment of Oil in the Presence of Broken Ice



In Situ Burn

- Outdoor Wave Tank and Program of Mid-Scale In Situ Burn Testing in Alaska
- Mid-Scale Tests to Determine the Limits to In-Situ-Burning in Broken Ice

Chemical Treating Agents

- Using Dispersants to Test and Evaluate the Effectiveness of **Dispersants in Cold Water and Broken Ice**
- Ohmsett 2003 **Cold Water Dispersant Effectiveness Experiments**
- The Effect of **Warming Viscous Oils** Prior to Discharge on Dispersant Performance
- Mid-Scale Test Tank Research On Using **Oil Herding Surfactants** To Thicken Oil Slicks In Broken Ice
- Understanding the **Effects of Time and Energy** on the Effectiveness of Dispersants
- Research at Ohmsett on the Effectiveness of Chemical Dispersants on **Alaskan Oils** in Cold Water

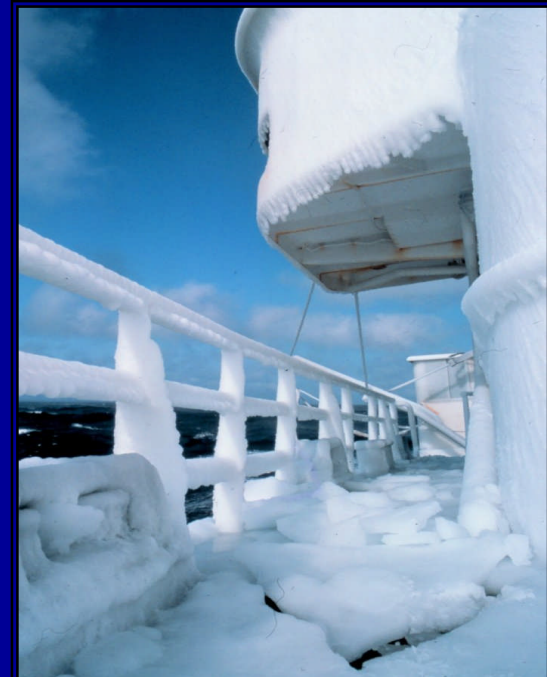
Remote Sensing



- Detection and Tracking of **Oil Under Ice**
- New and Innovative Equipment and Technologies for the Remote Sensing and Surveillance of **Oil in and Under Ice (3 phases)**
- Svalbard, Norway **Experimental Oil Spill**
To Study Spill Detection and Oil Behavior in Ice

Arctic Safety Projects Including Ice Mechanics

- Technology Assessment for Outer Continental Shelf, Oil and Gas Operations in the Arctic Ocean
- Structural Materials for Arctic Operations
- Mechanical Properties of Sea Ice
- Ice Stress Measurements
- Mechanical Properties of Saline Ice
- Numerical Modeling of Ice-Structure Interaction Development and Testing of an Ice Sensor
- Behavior of Concrete Offshore Structures in Cold Regions
- Probability Based Design Criteria for Ice Loads on Fixed Structures in the Beaufort Sea
- Engineering Properties of Multi-year Ridge Sea Ice
- Ice Forces Against Arctic Offshore Structures
- Engineering Properties of Subsea Permafrost
- Assessment of Structural Icing
- Superstructure Icing Data Collection and Analysis
- De-icing and Prevention of Ice Formation on Offshore Drilling Platforms

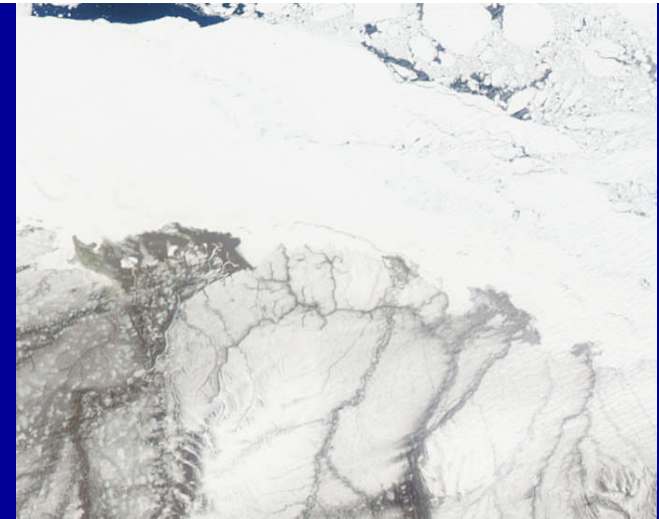


Arctic Safety Projects (cont.)

- Wave Erosion of a Frozen Berm
- Evaluation of Short, Large-Diameter Piles for Arctic Applications
- Structural Icing Study, St. George Basin
- Punching Shear Resistance of Concrete Offshore Structures for the Arctic
- Measurement of Ice Stress Around a Caisson Retained Island in the Beaufort Sea
- Feasibility of Production, Loading and Storage Systems for the North Aleutian Basin
- Chukchi Sea Transportation Cost Comparison Study
- Response to Spray Ice Structures to Ice, Atmospheric, and Oceanographic Forces
- Impact of Annual Ice with a Cable-Moored Platform
- Molikpaq Ice Force Measurement Program
- Impact of Crushed Ice on the Ice-Structure Interaction for Arctic Platforms
- Nipiterk Spray Ice Island-Summer Protection Experiment
- Reliability of Gravel Mat Foundations for Arctic Gravity Structures
- Chukchi Sea Transportation Update Study
- Offshore Pipeline Transportation Study for Lease Sale 87
- Arctic Underwater Structure Inspection

Arctic Safety Projects (cont.)

- Large-scale **Ice Fracture** Experiments
- Assessment of **Spray Ice** Technology
- Pressure Ridge **Ice Scour** Experiment (PRISE)
- **Sea Ice** Scaling Effects
- Application of an Engineering Model for **Ice/Soil/Pipeline Interaction**
- **Sea Ice Mechanics** Workshop
- Safety and Integrity of **Arctic Marine Pipelines**
- Risk Assessment for **Ice Damage** to Seabed Facilities
- An Engineering Assessment of **Double Wall Versus Single Wall** Designs for Offshore Pipelines in an Arctic Environment
- **Ice Scour & Arctic Marine Pipeline Workshop**
- IUTAM Symposium: Scaling Laws in **Ice Mechanics and Ice Dynamics**
- 22nd International Offshore Mechanics and **Arctic Engineering Conference** (OMME)
- Construction and Maintenance of **Ice Islands**: Current practice & future research.
- Design Options for Offshore **Pipelines in the US Beaufort and Chukchi Seas**
- **Arctic Offshore Technology** Assessment of Exploration and Production Options for Cold Regions of the US Outer Continental Shelf
- **Sea Spray Icing** of Drilling and Production Platforms
- Assessment of **Superstructure Ice Protection** As Applied to Offshore Oil Operations Safety
- **Seabed Scour and Buried-Pipeline** Deformation due to **Ice Ridges**
- Methods to **Reduce Lateral Noise Propagation** from **Seismic** Exploration Vessels
- Measurement and Control **Underwater Noise** from Oil **Drilling and Production** Operations



<http://www.mms.gov/>

<http://www.mms.gov/alaska/>

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Deepwater Exp./Devel.
Industry Awards
Royalty-In-Kind
Oil Valuation
Reengineering

Current Events

MMS Starts Preparation of New 5-Year OCS Leasing Program

The MMS solicited input from interested and affected parties as part of the process for preparing a new 5-year outer continental shelf oil and gas leasing program for 2002-2007. A notice in the [Federal Register](#) requested comments and suggestions for preparing the new program as well as information on issues and alternatives that should be addressed in the accompanying environmental impact statement. The [comments received have been posted](#) on this web site.

New Study Now Available

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, [Meteorology of the Northeastern Gulf of Mexico: Data from 1995 to 1997. Final Report](#). This study resulted in a meteorological database of the Northeastern Gulf of Mexico (NEGOM) that may serve as a "handbook" by planners or by analysts preparing initial assessment of conditions associated with nonroutine or accidental events.

Industry Awards Ceremony

Some of the best in the oil and gas industry will be honored April 4, 2001 at the Minerals Management Service annual [Industry Awards Ceremony](#) in Houston, Texas. Recipients of the 2000 Corporate Leadership Award will be recognized for performing an act or service that enhanced the MMS mission objectives.

35 States Receive Record \$800 Million

Highlights

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Questions?
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Please Write:
[Alaska Region Public Information](#)

Welcome!

Welcome to the Alaska Outer Continental Shelf (OCS) Region of the [Minerals Management Service](#) (MMS). MMS is a bureau of the [Department of the Interior](#). Our mission is to manage the mineral resources of the Outer Continental Shelf in an environmentally sound and safe manner.

If this is your first visit to the Alaska Region web, be sure to check out the [Regional Director's Update](#) and the [Navigation Tips](#) pages. If you have any suggestions for improvements or were unable to locate the information you were searching for, be sure to sign our [Guest Book](#) and let us know what you would like to see.

MMS issues draft Environmental Impact Statement for the proposed Liberty Development Project in the Beaufort Sea, Alaska. For the full text of the draft EIS and related documents [click here](#).

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